## REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-20 are pending in this case. Claims 1, 4, 6, 9, 11, 14, and 16 are amended by the present amendment and new Claims 17-20 are added by the present amendment.

Amended Claims 1, 4, 6, 9, 11, 14, and 16 are supported by the specification and original claims<sup>1</sup>. Amended Claims 1, 4, 6, 9, 11, 14, and 16 add no new matter. New Claims 17-20 are supported by the specification.<sup>2</sup> New Claims 17-20 add no new matter.

In the outstanding Official Action, Claim 1-16 were rejected under 35 U.S.C. §112, second paragraph, as indefinite. Claims 1-2, 6-7, 11-12, and 16 were rejected under 35 U.S.C. §102(b) as anticipated by Harrell (U.S. Patent No. 5,457,779). Claims 3-4, 8-9, and 13-14 were rejected under 35 U.S.C. §103(a) as unpatentable over Harrell in view of Manning (U.S. Patent No. 5,729,503). Claims 5, 10 and 15 were rejected under 35 U.S.C. §103(a) as unpatentable over Harrell in view of Manning and further in view of Yamagami et al. (U.S. Patent No. 6,229,954).

An interview was held on March 4, 2004 to discuss the present case, attended by Examiner Au, Examiner Tucker, Ed Tracy, and Surinder Sachar. The applicant would like to thank the examiners for their time in conducting the interview. The differences between the amended claims and the cited references were discussed in detail. Arguments based on these discussions are presented below. During the interview, it was agreed that the claim amendments overcame the current rejections, but a further update search and consideration was required.

Claims 1-16 were rejected under 35 U.S.C. §112, second paragraph, as indefinite for including the phrase "manifest image" in Claims 1 and 6. The term "manifest image" in the

<sup>&</sup>lt;sup>1</sup> See e.g. the Specification at page 13, lines 3-18, page 16, line 25 to page 17, line 4, page 46, line 18 to page 47, line 6, and page 32, lines 7-13.

<sup>&</sup>lt;sup>2</sup> See Specification at page 7, lines 15-23.

specification and claims is intended to mean an image that is a reproduction of the original image. Claims 1 and 6 have been amended to eliminate the use of the phrase "manifest image" in favor of the clearer term "reproduction." Accordingly, applicants submit Claims 1-16 are in full compliance with all requirements under 35 U.S.C. § 112, second paragraph.

Claims 1-2, 6-7, 11-12, and 16 were rejected under 35 U.S.C. §102(b) as anticipated by <u>Harrell</u>. To the extent that the rejection applies to amended independent Claims 1, 6, 11, and 16, applicants respectfully traverse the rejection.

Amended independent Claim 1 recites "a sensor board unit arranged to receive image data based on a scanned original document."

Harrell discloses an apparatus for displaying surfaces on a computer display. The surfaces are computed by software approximations to the true surfaces. The approximate surfaces are broken down into triangles and quadrilaterals to be rendered on a display screen. The apparatus disclosed by Harrell uses SIMD processing to efficiently and quickly display the approximated surfaces on a display screen.<sup>3</sup> Applicants respectfully submit that there is no teaching or suggestion in Harrell for a sensor board arranged to receive image data based on a scanned original document, as recited in Claim 1.

Claim 1 further recites "an image writing unit arranged to transfer said reproduction of said original document to a second document."

As discussed above, <u>Harrell</u> discloses an apparatus for displaying approximated geometric surfaces on a computer display. Applicants respectfully submit that there is no teaching or suggestion for an image writing unit arranged to transfer a reproduction of an original document to a second document, as recited in Claim 1.

Since <u>Harrell</u> does not disclose each and every element of Claim 1, applicants respectfully submit that Claim 1 is not anticipated by Harrell.

<sup>&</sup>lt;sup>3</sup> See Harrell column 1, lines 14-42 and column 11, lines 48-67.

Claims 2-5 and new Claims 17-20 are dependent from Claim 1, which applicants respectfully submit is patentable. Thus, Claims 2-5 and 17-20 are also believed to be patentable.

Claims 3-4, 8-9, and 13-14 were rejected under 35 U.S.C. §103(a) as unpatentable over <u>Harrell</u> in view of <u>Manning</u>. To the extent that the rejection applies to amended Claims 4, 9, and 14, applicants respectfully traverse the rejection.

As stated above, applicants believe Claim 4 is allowable as dependent from Claim 1, which applicants believe is patentable over the cited references. Applicants also believe that Claim 4 is allowable because it further recites elements not taught or suggested by the cited references.

## Amended Claim 4 recites:

wherein said control register reads data redundantly from said memory, in accordance with a control signal provided from outside, and sets a redundant readout transfer mode for transferring data to said arithmetic processing section, such that a plurality of processing elements in said arithmetic processing section receive data from a single memory address

Manning discloses a memory device arranged to perform high speed burst access read and write cycles.<sup>4</sup> Manning teaches that the disclosed memory device may be used in combination with a fast SRAM cache to provide fast access to a main memory in the event of a cache miss.<sup>5</sup> The outstanding Office Action cited Manning as suggesting redundant memory access, as Manning suggests reading data from two different sources, an address in the memory 124 and an address in the cache 132<sup>6</sup>, into a single processing element. Claims 4, 9, and 14 have been amended to clarify that data is redundantly read from a single memory address into multiple processing elements of the arithmetic processing section, as shown in Figure 12. Applicants respectfully submit that Manning does not teach or suggest reading the

<sup>&</sup>lt;sup>4</sup> See Manning at column 2, line 53 to column 3, line23.

<sup>&</sup>lt;sup>5</sup> See Manning at column 11, lines 60-64.

<sup>&</sup>lt;sup>6</sup> Manning, Figure 8.

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same data from a single memory address into a plurality of processing elements, as recited in Claim 4. Thus, applicants respectfully submit that Claim 4 is patentable in light of the cited references.

Amended independent Claims 6, 11, and 16 recite similar elements to Claim 1.

Applicants respectfully argue that Claims 6, 11 and 16 are patentable over the cited art for the reasons discussed above with respect to Claim 1.

Claims 7-10 are dependent from Claim 6, which applicants respectfully submit is patentable. Thus, Claims 7-10 are also believed to be patentable.

Claims 9 and 14 recite similar elements to Claim 4. Applicants respectfully argue that Claims 9 and 14 are patentable over the cited art for the reasons discussed above with respect to Claim 4.

Claims 12-15 are dependent from Claim 11, which applicants respectfully submit is patentable. Thus, Claims 12-15 are also believed to be patentable.

Accordingly, the outstanding rejections are traversed and the pending claims are believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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